

FIG. 1

OSPF message exchange in shared segment

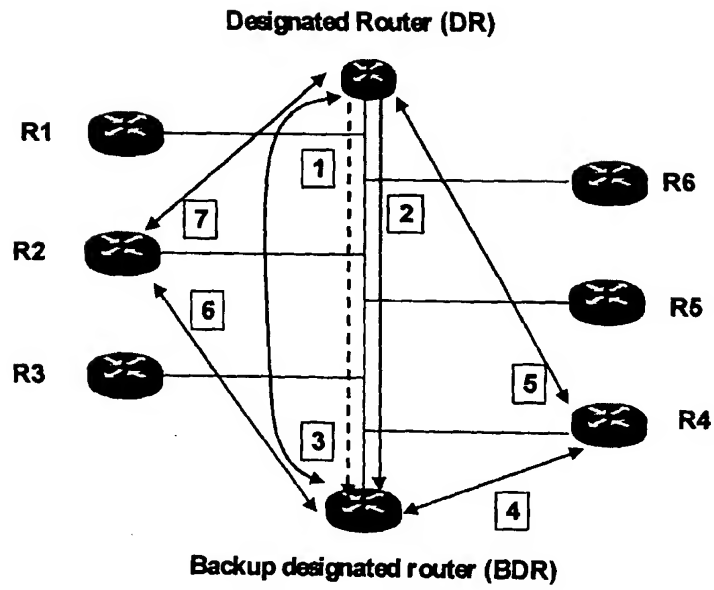


FIG. 2

Jump-start and group re-keying process

Source IP Address = Router-1
Destination (Multicast) IP Address = "Start-up Channel Address"
Random Value (or Time Stamp)
Digital Signature (DS1)

**FIG. 3**  
**JUMP-START PACKET**

Source IP Address = DR
Destination IP Address = BDR
Message Type = Session key update
Time Stamp
Session Key

**SESSION KEY UPDATE  
PACKET**

**FIG. 4A**

Source IP Address = BDR
Destination IP Address = DR
Message Type = Session key ACK
Time Stamp

**SESSION KEY UPDATE  
ACKNOWLEDGMENT  
PACKET**

**FIG. 4B**

**FIG. 4  
SESSION KEY UPDATE PACKET,  
SESSION KEY UPDATE ACK PACKET**